### New Department for Everet Beckner



EVERET BECK-NER to manager of Plasma Physics Research Department 5240, effective March 1.

Everet joined Sandia as a staff member in the Plasma Physics Research Division in 1961. In 1965, he was pro-

moted to division supervisor. His specialty has been applied and basic research in plasma physics and plasma radiation phenomena.

Before joining Sandia, Everet was associated with the Lockheed Missiles and Space Division for one and one-half years.

A graduate with a BS degree in physics from Baylor University, Everet also holds MA and PhD degrees in physics from Rice University. At Rice, he was a teaching assistant.

Everet is a member of the American Physical Society.

#### Volunteer Agencies Need Variety of Assistance

In volunteer work it is often a problem to match the volunteer with the agency needing help. The Community Council of Albuquerque has such a volunteer bureau with a listing of specific needs.

Here are some of the volunteer jobs currently listed by the bureau: for child development centers (pre-school age children)-musicians, language teachers, projector operator, nursery and kindergarten aids, drivers, carpenters, dieticians; for neighborhood centers - recreation aids and assistants to Scout and Brownie troop leaders; hobby camp — instructor in simple crafts, poster maker, typist, seamstress, telephone committee assistance; volunteers to visit shut-ins, talk and read to them and run errands; clerical and general office work for a volunteer agency; volunteers to assist the staff at all hospitals; book mending and vertical file assistance at a library; tutoring; drivers in all areas of town for welfare patients who need medical aid but lack transportation; clerical aid and receptionist for legal aid society; and swimming instructor aid for mentally and physically retarded children.

The list is long, the need is pressing. Please call the Volunteer Bureau at 247-3671 if you can help.



# SANDIA LAB NEWS

VOL. 21, NO. 6, MARCH 14, 1969

#### Like a Flying Aardvark —

## Hardworking 'Beast' Flies 20 Drop Tests per Hour

"The Beast" is what they call it.

It resembles a fat Ford Trimotor of the late '20s but its wingspread is only nine feet from tip to tip. It weighs about 20 pounds but it can carry a 12-pound test unit to 2600 feet altitude and drop it upon radio command.

For certain testing tasks, the radio-controlled model plane is ideal. It can save Sandia time and money. The system is a further development in the use of small radio-controlled model airplanes as Laboratory testing tools.

The Beast is planned for use in the development of an experimental terradynamic shape and a miniaturized telemetering system. The drop tests will provide a means to measure impact deceleration in various terrains. Walt Howerton of Ordnance Test Projects Division 7213 is the project leader for the test program.

More than 25 preliminary tests have been completed in the development program for the Beast. When operational, the Beast can substitute in certain instances for full-scale aircraft which cost Sandia up to \$140 an hour.

Dan Parsons, supervisor of Mechanical Design Division 7214, has been a radio-controlled model airplane enthusiast for years. Through his efforts in the past, the small planes have been used in a number of Sandia projects. (LAB NEWS, June 14, 1968.)

The Beast is the latest of the small planes to provide a valuable extension of Laboratory testing capability. Previously they have been flown to give practice to tracking telescope operators at Tonopah Test Range, to carry air pressure gages over an HE explosive test in Coyote Canyon, and to drop brightly painted dummy units as tracking targets for a study of different motion picture films under varying conditions. One of the more important



ABOVE ROAR of three motors going full blast, Ted White (right) signals that the synchronization of the engines sounds OK. Dan Parsons (7214), center, adjusts the needle valves while Chad Miller (7214) anchors the Beast. The radio-controlled plane is being used to drop 12-pound test units.

projects is the use of the small planes as targets for automatic tracking mounts now under development at Sandia.

The Beast is not a pretty airplane but it flies beautifully. It can take off fully loaded, climb to 200 feet, drop the test unit, and land — all in less than two minutes.

The small plane was "designed" by Dan and Jim Stark of Weapon Aerodynamics Division 9325. In this case, "design" means sketching requirements for

the plane with Karl McGinnis of Pattern Shop 4232-3 who worked out the construction details and built the plane.

The three small engines on the Beast develop a total of about three horsepower. They are synchronized by running them at full power and adjusting the needle valves "by ear" until they sound right. The three motors are operated by the same throttle control.

For flight operations, Sandia contracts for "pilot" services with Ted White, a local manufacturer of radio-controlled model aircraft equipment and "one of the best flyers in the business," according to Dan.

Most of the recent drop tests were conducted from altitudes between 200 and 500 feet. Eyeballing the target — a cloth pennant on a stick — Ted managed one direct hit and placed the rest of the drop units within 40 feet of the target. Ted and Dan estimate altitude, speed, and distance of the plane from the target and hit the release button when it looks about right. Their accuracy is remarkable.

"The model plane system gives us tremendous flexibility in test programs such as this," Dan says. "We can make as many as 20 drops in an hour and we can operate in most any remote area."

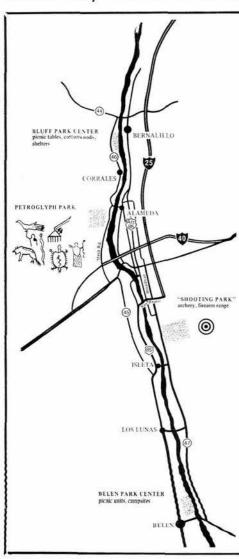
Dan points to other advantages of the small planes — speed and ease of operation, extreme maneuverability, efficiency, economy, adaptability to various projects and simplicity of logistics. The aircraft system uses readily available equipment and the complete system can be transported in the back of a station wagon.



TERRADYNAMIC test unit is loaded into the bomb bay of the Beast by Chad Miller (7214). Release mechanism for the drop is controlled by the "pilot" using a radio transmitter.

#### Central Rio Grande Park?

### Scenic, Recreation Areas Along River Urged by Many



Will our city ever be known as Albuquer-que-on-the-Rio-Grande?

Probably not. In fact, tourists driving through the city are usually very disappointed in what they see of this major river. The shallow muddy waters hardly fit anyone's romantic ideas.

But the potential is there: the massive cottonwood trees, the maze of Russian olives and salt cedars which give protective cover for nesting birds, the green marshy places, the quiet areas within the heart of the city. Albuquerque is fortunate to have a river wilderness at hand which offers so many recreational possibilities.

The problem of how best to use the scenic and recreation potential of this area has been investigated by various groups and has been actively promoted by several Sandians — Raymond Garcia (3462) as a state representative; Florencio Baca (4574) as a member of the Albuquerque Urban Progress, and Charlie Hines (3512) as vice chairman of the New Mexico Parks and Recreation Commission.

Ray became interested because a section of the river flows through the district he represents as a legislator. "I can remember walking along the banks as a youngster and I'm sure it has just as much appeal for children today," he says. "Properly developed, the area along the river would draw people to the city, rather than sending them out-of-state for recreation."

Ray was responsible for introducing a bill during the 1967 session of the State Legislature which appropriated \$50,000 for a study of park possibilities, and during the present session he introduced a bill authorizing a \$2.3-million severance tax bond issue for parks development, of which \$400,000 was earmarked for the initial phase of a Central Rio Grande Park.

Florencio also has been been aware of the river's possibilities for many years. He recalls meetings held in different parts of the city about 16 years ago in an attempt to "do something to wake up the sleeping Rio Grande." Later, the West Side Lions Club (to which he belongs) took up the cause. When the Albuquerque Urban Progress organized, Florencio joined as an interested individual. He felt this project should be pushed as well as ordinances restricting billboards and controlling pollution

Money is the big problem in the park project, according to Charlie Hines. "Much of the land would be donated and matching Federal funds would probably be available for initial improvements, but the state — or the community — would still have to come up with construction costs," he says. "In addition, funds for maintenance could be a big problem."

The feasibility study of the Central Rio Grande Park recommended four initial projects estimated to cost \$400,000. Bluff Park Center, on the west side of the river near Bernalillo, would include a lookout point and picnic units. Petroglyph Park, west of Alameda, would feature numerous Indian inscriptions on rocks. Belen Park Center, in a cottonwood grove alongside the river, would contain picnic units and campsites. Shooting Park, on the east mesa south of Albuquerque, would consist of rifle, pistol and archery ranges.

Whether the funds are allotted this year or in the future, the potential is there and interest in a Central Rio Grande Park is high

# LIVERMORE NEWS Three Teach Math At Chabot College

VOL. 21, NO. 6

SANDIA LAB NEWS

MARCH 14, 1969



WISE OWL-Vice President Tom Cook (8000), left, inspects the remains of the safety glasses which prevented serious eye injury to Ken Mitchell (8174), right, in a Livermore vehicle accident. Ken was welcomed into the Wise Owl Club recently by Vice President Cook and E. A. (Scotty) Romine of Safety Engineering Division 8255. The club is sponsored by the National Society for Prevention of Blindness, with membership limited to those whose eyesight was saved by safety glasses.

#### New Wise Owl

### Safety Glasses Prevent Eye Injury for Livermore Employee

Ken Mitchell, an engineer in Systems Hardening Division 8174, is Sandia's newest member of the exclusive Wise Owl Club of America. The organization is sponsored by the National Society for Prevention of Blindness

Ken, who escaped severe injury to his eyes in a vehicular accident by wearing safety glasses, was presented with a membership certificate, a lapel pin, and badge from the national headquarters of the Wise Owl Club. Vice President Tom Cook (8000) made the award.

The accident occurred last Oct. 4 while Ken was riding his motorcycle in Livermore. When the driver of a carryall, traveling in the opposite direction, made a left turn into Ken's lane, he slammed on the brakes to avoid a collision. Because of gravel on the street, the cycle skidded and Ken struck the side of the carryall head first. The impact broke off one bow on the glasses, loosened one lens, and severely scratched both lenses. Although there was no damage to his eyes, he received other injuries, including a broken right leg, and is still on crutches.

Membership in the Wise Owl Club is made up of people whose eyes were saved from injury or loss of sight through the use of safety glasses. Five other Sandians at Livermore are members of the organ-

#### Construction Starts on Radiation Test Facility At Livermore Laboratories

The AEC has awarded a \$182,500 contract to Wallace Webb and Son of Hayward for the construction of a Radiation Test Facility in Area 8 of Sandia Laboratories Livermore. The 2400-square-foot, concrete-masonry building will contain high and low bays.

The contract also calls for electrical improvements between the main laboratory area and Area 8. Improvements involve installation of underground power lines and removal of temporary overhead power

Construction started Feb. 5, and is scheduled for completion about June 13, 1969. Plant engineer for the project is Len Bedinger (8251).

### Bob Weaver Awarded MA Degree in Natural Science



Bob Weaver (8312) received a Master of Arts degree in natural science recently from San Jose State College. His major was in geology.

All of his graduate courses were completed while attending evening

classes at San Jose State College over the past five years.

Assigned to Materials Application Division 8312, Bob is presently working on basic property studies in filament winding. He joined Sandia Laboratories Livermore in August 1957 and has been in the materials application organization the entire time. Most of his efforts have been in the development and application of honeycomb structures.

Bob received his BS degree in chemical engineering from Washington State University in 1943.

#### Congratulations

Mr. and Mrs. Marv Loll (8137), a daughter, Carrie Jane, Feb. 18.

Mr. and Mrs. Bob Tirnetta (8245), a daughter, Sherry Deane, Feb. 20.

#### Sympathy

To Dewey Farmer (8163) for the death of his mother in Checotah, Okla., Feb. 13. To Hazel Willyard (8322) for the death of her mother in Los Angeles, Feb. 13.

Three Sandians — all of Numerical Applications Division 8321 — teach as parttime instructors in Chabot College's Department of Mathematics and Science. All spend one to two evenings a week conducting classes in mathematics or related subjects for the college's Evening Extension Operations.



Frank Cupps teaches trigonometry. In May 1958, he joined Sandia Laboratories at Livermore as a technical writer. In 1964, he transferred to his present assignment as a computer programmer in Division 8321. Frank

received a BS degree in English from New York's Columbia University in 1958. He received an MS degree in math from California's San Jose State College in 1966 while studying under Sandia's Educational Aids Program.



Verlan (Gabe) Gabrielson teaches college algebra. He joined Sandia at Livermore in August 1959 and has been assigned as a computer programmer in Division 8321 since that time. Gabe received a BS degree in math in

1954 from Bethany College, Lindsborg, Kans. In 1959, he received an MS degree in math from Kansas State University, Manhattan, Kans. He taught math at Kansas State University for two years before joining Sandia.



Ronald Saltgaver recently taught a course in slide rule and now teaches intermediate algebra. He joined Sandia at Livermore in June 1967 and has been assigned since to Division 8321 as a computer program-

### Take Note

Congratulations to Roger Busbee (8183) for bowling a near perfect game recently in the Granada Classic League at the Granada Bowl in Livermore. He scored 11 strikes in a row; on the twelfth, he hit the pocket but left a shaky seven pin-for a 299 game!

Roger won several prizes, including a gold ring, and becomes a member of the American Bowling Congress "299 Club," entitling him to an ABC patch and certificate.

As a result of his feat, he also has been named the "Bowler of the Month" in the men's category at the Granada Bowl.

Dennis Nelson (8125) spoke at a meeting of IMOG's (Interagency Mechanical Operations Group) Subgroup on Environmental Testing held at Mason and Hanger, Burlington, Iowa, March 12-13. He discussed "Cosine Shock Loading and Instrumenting Full Size Reentry Vehicles."

Jim Spirup of Security Administration and Operations Division 8236 was guest instructor at a recent Industrial Security School conducted by Texas A&M University. The course, entitled "Basic Security" and augmented with color slides, described the structures of a security organization and the factors essential to the establishment of an effective guard force for government and private enterprises.

Elmer Smith (8151) shot a low net score of 71 to win the first place trophy in the Sandia Employees Golf Club tournament on Feb. 1. The straight handicap tourney was played at the Tracy Golf and Country

Bill Ryan (8243) placed second with a low net score of 72 and John Barnhouse (8226) finished third with a 73. In the hole-in-one contest, Chuck Riney (8252) came closest to the pin.

mer. He was awarded a BS degree in math from Redlands University in Redlands. Calif., in 1965, and an MS degree in math from the University of Colorado in Boulder in 1967.

The Evening Extension Operations of Chabot College in Hayward and Livermore have 215 part-time instructors teaching 279 courses to 4500 students.



JUAN DOYEN Memorial Chess Tournament—Undefeated Ray Ng (8174), center, and Ollie Rohrback (formerly 8252), right, were first and second place winners, respectively, in the noon-time chess tournament started at Sandia Laboratories Livermore last November by Juan Doyen. Until his death in January, Juan was a draftsman in the Electronic Design Drafting Section, and one of the early transferees from Albuquerque when Livermore Laboratory was formed. The tourney now has been established as an annual event in his memory. Gene Lopp (8252), who took over as coordinator of the tourney, presented trophies to the winners. About 40 employees participated over a period of three months. Following standard chess rules, the tourney was played on the basis of double elimination.









## Sandia Labs' Aim: Help Those Who Need Help



STAFF SWAP — Jim Menzel, a writer in Technical Information Division, teaches a course in Technical Writing at the Technical-Vocational Institute, while the course's regular teacher, Bruce Hann, fills Jim's

job. In this exchange program professional educators gain industrial experience and participating Sandians can give the students the benefit of their experience.

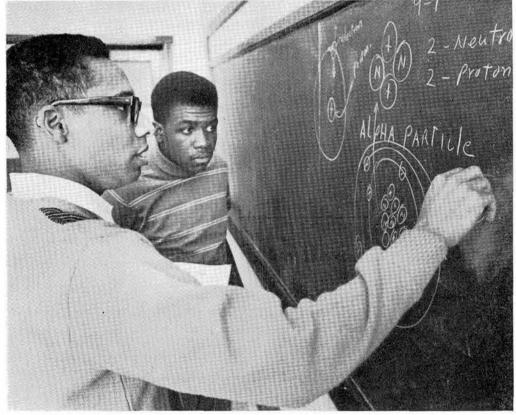


# SANDIA LAB NEWS

**COMMUNITY SERVICE EDITION 1969** 

Volunteer Tutors

## Help Given In Education Fundamentals



HELP IN SEVERAL subjects is given by Henry Monteith (9422) to a junior high school student. The tutoring, which began last fall, has already resulted in higher grades for the youth.

### It's ACTION That Counts

Sandia Laboratories employees enthusiastically support management's position that actions speak louder than words in the many programs aimed at helping the underprivileged, the disadvantaged, the handicapped and the poor. In this special edition we describe a number of these action programs. Some of these activities are part of Sandia's ongoing Affirmative Action Program as a Plans for Progress company, and others are the efforts of individual employees, functioning as concerned private citizens. The rewards for such dedicated community service workers are in the personal satisfaction they derive from helping others—not in the publicity. But we hope that these accounts of people at work in real service to humanity may inspire others and help to underscore the point that although none of us can do everything, each of us can do **SOMETHING.** 

Some children need a little extra help or attention to prevent their becoming discouraged and dropping out of school. Tutoring such children is an important community activity of Sandia employees.

Two typical Sandians who devote their free time to tutoring are Richard Beegle, an engineer in Devices Test Division 7332, and Henry Monteith, a computer programmer in Mathematical Computing Services Division 9422. In both cases the voluntary arrangement between tutor and pupil was made through the Tutoring Council of the Albuquerque Public Schools.

Dick has been tutoring a fifth grade boy in arithmetic since last fall. "This boy is bright, but has some trouble with reading and considerable trouble with arithmetic. I consider these two subjects the most important factors to success in education," Dick says. The tutor and pupil meet once a week and after the school work there is a little bonus: the boy received a guitar for Christmas and Dick helps him learn some easy chords.

This is Dick's second attempt at tutoring. Last summer he helped a high school girl improve her knowledge of geometry. "She wasn't the 'math type'," he says, "but needed this knowledge to get into college where she plans to major in psychology. After a few months' help she finally got the hang of it."

Dick has a BS degree in mechanical engineering from Michigan State University and received his MS degree at the University of New Mexico under Sandia's Technical Development Program.

Henry has a good reason for wanting to help students. "I often had great difficulties in school — in fact I almost flunked out once — and if it were not for the personal attention I got from someone helping me, I wouldn't be here today," he explains.

Henry was raised on a farm in South Carolina. His parents encouraged him to get an education, and engineering magazines in the high school library aroused his interest in this field. Four years as an electronics technician in the Navy further convinced him, and after discharge from service he attended Milwaukee School of Engineering where he received a BS degree in electrical engineering. Henry was hired at Sandia Laboratories Livermore in September 1967 and last fall he transferred to Albuquerque to work on his Master's degree at the University of New Mexico under the Computer Science Development Program. De-

(Continued Next Page)

"Because it is right" is the phrase that former President S. P. Schwartz used several years ago to describe Sandia's involvement in programs and practices aimed at achieving equality of education, employment, and personal growth for minority members of the community.

Because it IS right, President John Hornbeck has reaffirmed Sandia's intention to pursue that goal.

Sandia has taken an active role in establishing equal opportunity programs through both corporate and individual efforts, out in the community as well as in the Laboratories.

#### "Plans for Progress"

For many years, Sandia has sought to employ and promote individuals without regard to race, color, or creed. Ten years before the Civil Rights Act of 1964, Sandia revised its purchase orders to include a nondiscrimination clause to insure that suppliers would not discriminate among their employees. That same year, Sandia began to include Howard University in its recruiting schedule. Recruiting emphasis has been continually expanded in an effort to seek out qualified Spanish-American, Indian and Negro candidates.

Sandia has always tried to provide equal opportunity, and its efforts were formalized when a "Plans for Progress" agreement was made with President Johnson in 1964. Since then, the "Affirmative Action Program" that has evolved has achieved notable success.

#### "Secretarial Development"

There has been a significant rise in the number of minority group employees in all skills, largely because of Sandia's recruiting and training programs. Among these is the Secretarial Development Program in which a limited number of inexperienced or unskilled persons are hired and given formal on-the-job training to gain experience while waiting for a security clearance. The program creates a pool of trained and cleared candidates for jobs throughout the Laboratories.

Other efforts include the Joint Apprenticeship Programs, which qualify technicians in a number of specialities; the summer Youth Opportunity Campaign, which exposes students to an industrial environment before they return to the classroom; and the many in-hours and out-of-hours courses offered to employees.

The Affirmative Action Program assists schools and other community educational activities designed to improve employment chances of people in minority groups. Sandia pioneered an experimental training program for women from economically depressed areas, most of whom were welfare cases.

#### "Vocational Guidance"

Other activities are specifically designed to bring educators into the Laboratories where their understanding of the current needs of industry is enhanced. At the same time their academic views are useful to Sandia. Also, several Sandians were instrumental in establishing the annual Vocational Guidance Institute at which high school counselors are brought up-to-date on the skills needed by industry and the educational preparation necessary.

Sandia also employs high school and technical-vocational institute teachers during the summer months in a further effort to keep educators abreast of industrial demands.

Several Sandians helped establish the Albuquerque Technical-Vocational Institute and five other vocational institutes to serve depressed areas in the state.

Assistance to community programs is by no means limited to activities that help insure an adequately trained labor force. As a corporate citizen, Sandia supports and actively works to improve community life in general. Efforts range from support for the new Albuquerque Museum to an experimental project to reduce the dropout rates in public schools

Sandia's Division of Community Relations offers a variety of services such as distributing films and providing speakers for educational and civic groups. In addition,

(Continued Next Page)

### **VOLUNTEER TUTORS**

spite nine hours of graduate study and two out-of-hours courses (Astronomy and Hydrodynamic Stability), he finds time to tutor a junior high school boy.

Henry started the task last fall. The

#### Continued

#### SANDIA ASSISTS

a number of Sandians work with specific community organizations such as the Albuquerque Human Resources Council and the United Community Fund. A current project of the AHRC would reduce dropouts among secondary school students. In this project, minority group members working for area firms, including Sandia, will go into the classrooms where they will be "living witnesses" to the fact that it is possible for disadvantaged people to become a part of the mainstream of American life. Sandia has volunteered its training facilities for orientation classes for the living witness teams.

The Laboratories also cooperates with the Vice President's Task Force on Youth Motivation. Task Force representatives, themselves members of a minority group, visit predominantly minority group colleges throughout the country emphasizing that education and training are the keys to economic opportunity.

Sandia, along with other Albuquerque employers and organizations representing minority groups, sponsored an annual Job Fair where opportunities in local business and industry were made known.

A great many Sandians are involved as individuals in many community and civic activities. Why do they do it?

Community work can be time-consuming, occasionally frustrating, but always—"because it is right"—satisfying.

boy was a problem child, a troublemaker in class with lots of F's on his report card. "I work with him on any subject that is troubling him," Henry says. "His last report card showed all C's except for one E and his math ability has improved considerably, but it's hard to work with a boy who doesn't care or who doesn't use his potential abilities."

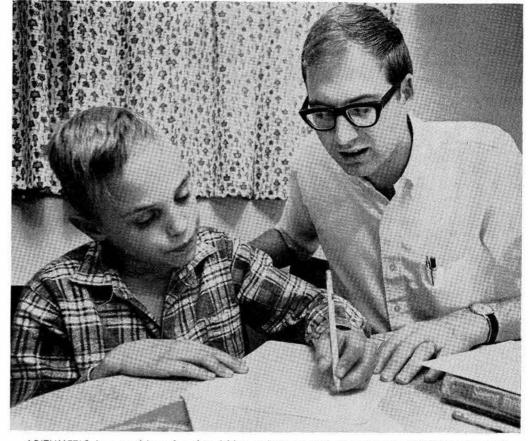
Henry believes the biggest problem in education and employment is motivating people who have "no feeling of self-worth." As he explains it, "You must have personal satisfaction in what you're doing."

In some instances the root of this problem is a lack of rapport between the child and his parents. "Many kids are in bad shape because they can't understand how they will fit into present society where machines do the menial work. Many of them just plain don't want to learn. For them, school is not an opportunity for self development," Henry explains.

Through the Tutoring Council, plans are underway to extend assistance beyond education and into social problems in troubled neighborhoods. Henry plans to continue his activity in this area and hopes to expand his own tutoring effort. "I'd like to work with three or four youngsters having similar problems. It would be a more efficient use of time and would help that much more," he says.

Both volunteer tutors agree: children are wonderful to work with!

Any employees or members of their families who are interested in participating in the tutoring program are asked to call Joe Willis, community coordinator, office tel. 242-1056 or home tel. 898-2735. Attempts are made to match tutors and children living in the same quadrant of the city and individual schedules are worked out. The only qualification is that you want to help someone.



ARITHMETIC is a problem for this fifth grade boy, but Dick Beegle (7332) works with him once a week under the Tutoring Council program of the Albuquerque Public Schools.

#### Person-to-Person

### Bill Benedick Helps People in Villages Of Chilili, Tajique, Escabosa, Torreon

Bill Benedick of Structural and Thermal Research Division 5131 would never call himself anything other than a man who tries to practice his religion. The people in the little mountain communities on South Highway 10, however, regard him as a year 'round Santa Claus or maybe a one-man Salvation Army. More important, he's a good friend.

Through Bill's efforts and those of a group of his friends during the past 10 years, a lot of kids have shoes, warm clothes, and self respect. A lot of small farmers have chickens, cows, goats, geese and household necessities such as sinks, stoves and furniture.

The community service center at Torreon has a library. The church at Chilili has electrical wiring and light fixtures. There are innumerable other things.

Although Bill provides many of the items himself, he works in subtle ways. "I don't give them anything," Bill says. "I'm a friend and I provide help. When I need something such as firewood, they help me. When I see a bright youngster grow up and get a job in Albuquerque or anyplace else, I get tremendous satisfaction — the kind you can't get any other way — because I might have helped that youngster on his way."

Bill's work is not part of any organized group. No organization provides the funds or the goods. Through the years, as many as 30 Sandians have been directly involved in the projects.

"Americans are the most generous people in the world," Bill says. "They will respond when you tell them about a specific need."

Bill's green panel truck is always parked in the lot south of the steam plant. Friends who know of Bill's work leave clothes, furniture and household items in the back of the truck. When the truck is full, Bill drives to Torreon to make a delivery.

Most of the deliveries are made to a community leader such as Mrs. Carmen Sanchez, Torreon postmistress. Mrs. Sanchez and a group of ladies arrange for a rummage sale. Clothes, for instance never sell for more than 10 cents.

"These are proud people," Bill says, "unable — and not willing — to qualify for welfare because many of them own their own land where they try to make a living growing beans and corn or selling fireplace wood. They don't accept charity and I'm not providing charity."

Money raised at the rummage sales is used for library books or maybe a gift of shoes for several children. The local ladies know the needs and they arrange the details.

"Right now," Bill says, "the most urgent need is for warm clothes for children. Anyone can make a delivery to Mrs. Sanchez at the post office in Torreon or call me at home, tel. 268-8460. I'll be happy to tell you about ways in which you can help."

### Craig Jones Serves on NAACP Board



For the past five years, Craig Jones, a programmer in Mathematical Computing Services Division 9422, has served on the board of directors of the Albuquerque Branch of the NAACP. Recently, he was elected treasurer of the organization.

Craig's long experience in the civil rights movement has made him a pessimist. With a mathematician's precision he lists his areas of concern:

(1) He feels the Human Rights Bill now

being considered by the State Legislature is a must for New Mexico. It fills in gaps not covered by Federal legislation.

(2) Unemployment — New Mexico has a Negro population of more than 4500. The Negro unemployment rate is eight percent compared to four percent for whites. There are many cases where unemployed men have had to desert their families to qualify for welfare.

(3) Craig recommends the establishment in Albuquerque of a civilian review board similar to those in other cities, which would review the policies and actions of local police.

(4) Education—Albuquerque schools are in crisis. The worst crisis situation exists in schools serving minority groups. More

technical and vocational training is needed on the high school level.

(5) Textbooks—Most history texts used in New Mexico schools ignore the contributions made by minority groups. "For instance, Indians are treated as ignorant savages. No attempt is made to understand or present their point of view," he says.

(6) Complacency — There is no active concern about civil rights by large numbers of middle-class Americans. Urban problems are pressing, demanding solutions now, but apathy and bureaucratic thinking continue to be the order of the day. Too many people are content to give lip service to these problems.

Only hard work by concerned individuals can solve the problems, Craig believes. The NAACP concentrates on areas where the law and legal means can be used to gain their aims. It is a responsible, step-by-step approach. The NAACP also promotes support for legislation such as the Human Rights Bill in New Mexico.

"If enough concerned citizens write their representatives, the bill will be made into law. If enough concerned citizens act individually and within their own organizations, then there will be solutions," Craig says.

### **SANDIA LAB NEWS**

Published Every Other Friday



SANDIA LABORATORIES

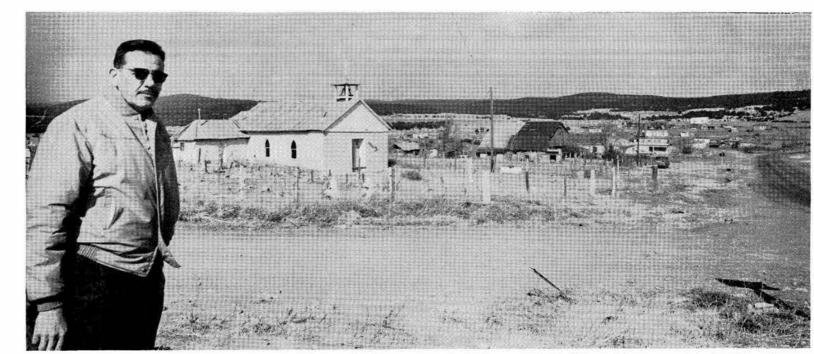
ALBUQUERQUE, NEW MEXICO LIVERMORE, CALIFORNIA

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BILL BENEDICK (5131) has helped the people of the small villages in the Manzano Mountains as a personal project during the past 10 years. He is not a member of any organized group but works

with local community leaders and is supported in his efforts by a large number of Sandians. In the background above is the village of Tailoue

### Sandians Work to Gain Housing Development for Livermore Elderly

Nurse Mildred Whitten (8215) and engineer Jerry Maloney (8128) are two Sandians who may soon see the tangible results of nearly three years of civic work. Their plans will take form about January 1970 when construction begins on a low-rent, 55-unit, garden-type housing development for the elderly.

Both Mildred and Jerry are active in a group called Interfaith Housing. The nonprofit organization evolved from a committee, made up of representatives from several religious groups, whose purpose was to study the need for low-rent housing for the elderly in Livermore. Under the National Housing Act of 1959, the Department of Housing and Urban Development (HUD) will provide long-term, low-interest loans for housing projects for the elderly. However, the project must be sponsored by a stable community organization that can be expected to maintain long-term policy guidance over the project. Interfaith Housing meets these requirements.

"I had no idea of the amount of work to be done when I first learned of the project early in 1966," says Jerry. "First we had to establish the need for the project. After that, we had to decide on where and what to build."

Project need was verified in a door-todoor survey of 2326 homes in Livermore. From this the committee determined that they should plan for at least 107 tenants. Age of the head of the household would be



SITE OF HOUSING PROJECT FOR ELDERLY being developed by members of Interfaith Housing, Inc., is studied by committee-member Jerry Maloney (8128).

62 or more years, annual income would not exceed \$4800 if single, nor \$5400 for a couple, and no tenant would need outside care. Proceeding on these criteria, the committee decided to plan for 55 apartment units.

Selecting the housing location was especially time-consuming. HUD specified that the site must be reasonably near a shopping center, recreation areas, churches and other public facilities. Emergency transportation had to be available for the residents. Cost of such choice land was a critical factor. A limit of \$13,900 per unit is the maximum amount HUD would loan for the development, and that amount included purchase of land as well as all other costs. Then too the project had to conform to the planning and building requirements of the city of Livermore.

In addition to the volunteer help within Interfaith Housing, Inc., the professional services of an architect, attorney and a consultant knowledgeable in public housing developments were needed. "Fortunately," says Jerry, "the professional people deferred their fees and made them contingent upon getting the loan approved."

First attempts to acquire land were unsuccessful. Finally, suitable property became available and an option was taken on three acres of land located behind the East Avenue Shopping Center. Meetings followed with the Livermore Planning Commission and City Council and, at length, a permit was granted. The lengthy, complex loan application for \$769,000 was submitted to HUD in December 1968.

Rental costs of the apartments should be low because the development is financed by a low-interest loan. Rent includes enough to make the project selfsufficient and covers the manager's salary, emergency transportation, gas, electricity, water, garbage and maintenance.

Both Mildred and Jerry attach particular importance to the enthusiasm displayed by the volunteers working on the project.

"I'm not sure," says Mildred, "who has benefited more from work on the project — the committee members or the elderly. The project is an effort to keep rents down for elderly people whose retirement has been adversely affected by the pace of modern economics or a serious illness. Knowing you have helped satisfy a very real need is its own reward."

## **Livermore Activities**



JERRY JONES (8164) reviews a tape/slide presentation on funding of ACCORD, an organization to prevent discrimination and segregation in the Livermore area. Jerry helped develop the presentation as chairman of ACCORD.

#### ACCORD . . . to Overcome Racial Division

### Jerry Jones Aims to Prevent Segregation in Livermore Area

"Our aim may be summed up as the desire to firmly establish 'one nation, under God, indivisible with liberty and justice for all'," says Jerry Jones (8164). Jerry is speaking as chairman of a Livermore-Amador Valley organization known as "ACCORD," A Coordinating Committee to Overcome Racial Division.

Convinced that there are racial problems in the Valley, members of ACCORD hope to make all citizens aware of prejudices and apathetic attitudes which contribute to racial injustice.

"Discrimination and segregation cannot be reconciled with the truth that all men are created equal," Jerry says. "ACCORD members feel strongly that the problems contributing to racial division should be the concern of every person in the Valley."

ACCORD was formed last year following the release of the Kerner Commission Report on civil disorders and after the assassination of Dr. Martin Luther King. At that time a large group of concerned people from Pleasanton, Dublin and Livermore organized to prevent further discrimination and segregation from taking root in the local area.

Their concern extends to the future, when — by 1980 — the Livermore-Amador Valley is expected to have 150,000 people. As chairman of ACCORD, Jerry chiefly

As chairman of ACCORD, Jerry chiefly directs the programs that focus on major areas of discrimination—housing, employment and education.

"We support and encourage the hiring of persons from minority groups on all levels of city, school and government jobs," says Jerry. "In the school system, cooperative efforts in teacher recruiting, curriculum and school policies have been established; and a task group is currently working towards the development of adequate housing for all people.

Jerry has personally found that racial discrimination and harrassment in the Valley are no myth. Some managers of apartments freely admit refusing to rent to persons because of their race, and instances have been documented where people or their families have been harrassed and even threatened.

"On one occasion an oriental family was told to stop babysitting black children in their home, or the neighbors would make it "tough" for them," Jerry says. "In a different instance," he adds, "a builder agreed to sell to a person from a minority group only if the prospective buyer would pass a petition around the neighborhood to see if anyone objected.

"Another occasion I readily recall involved employment," Jerry says. "This person was told of a job opening by an employment agency, only to be informed upon arrival for the interview that the position had been filled, when, in fact, such was not the case."

During the past several months, AC-CORD has devoted a good deal of its energy to the passage of a Human Relations Ordinance in Livermore. On Feb. 18, in a referendum election, Livermore voters defeated the enactment of this ordinance. The vote was 2590 for and 5886 against the seating of a Human Relations Commission which had been appointed by the City Council to deal with discrimination at the local level. "The tasks now ahead for ACCORD are all the more complex and difficult, requiring an even more intensive commitment from its members," says Jerry.

In addition to serving as chairman of ACCORD, Jerry is also involved with the present campaign for funds. "For the past year, ACCORD has progressed entirely with volunteer help," says Jerry. "To do an effective job, an adequate budget and a full-time staff are necessary.

Language Frustration and New Math

## Laboratory Draftsman Tutors Mexican Student

Unless you've seen it, it's difficult to imagine the frustration a 17-year-old Mexican boy endures as a newcomer in an American high school.

Everyday conversation presents enough problems when you have only a limited English vocabulary. But adding "new math's" terminology and theory to a study schedule could dim any hope a boy might have for achievement.

For three months now, Dick Finn (8252), who speaks no Spanish, has gone to the boy's home—where only Spanish is spoken—twice a week to help the boy with his homework—primarily new math and English vocabulary. Dick's wife Wanda spends an equal amount of time with the boy's mother.

Dick says, "The project started when my wife and I read about an adult literacy course being taught in Livermore. Shortly after we completed the course, I learned about the boy and his family. I decided to de compething to help them.

do something to help them.

"I was apprehensive at first. I couldn't claim any teaching or tutoring experience.
And I had a built-in language barrier because I didn't speak Spanish. These factors made me feel unequal to the task. My wife had similar misgivings about her role in helping the family. Nonetheless, both of us resolved to do the best we could."

Armed with knowledge gained from the adult literacy course and an English-Spanish dictionary, Dick proceeded with his assignment.

Dick relates that "both the boy and I have difficulty selecting the proper word when translating from one language to the other. Many English words sound alike

but mean different things. When simple words such as 'nothing,' 'quite,' and 'meat' fail to have meaning for the student, it is understandable if math words cause difficulty. For example—'commutative,' 'associative,' and 'distributive.' Simple math symbols are understood by both of us, but we bog down substituting words for the symbols.''

To Dick, helping a boy and his family doesn't seem especially significant. He plans to continue his work until he is satisfied that he has done all he can. He states, "There are times when I'm painfully

aware of my lack of patience, but when the boy appears to be catching on I enjoy a special reward. I can also see the acute need for more people to become involved in such teaching projects. Other members of the boy's family need help, too."

Dick knows he would appreciate like help if he were newly arrived in another country.

"Hopefully," Dick says, "someone would at least tell me not to buy canned goods by looking at pictures on the labels. What you might think was fish could turn out to be cat food . . ."



SANDIAN DICK FINN (8252) and wife Wanda discuss lesson materials used to help a Mexican family learn the English language. Dick tutors the 17-year-old boy in the family.



SANDIAN AND FRIENDS - Ron Hayenga (2451), who is no Minnesota Fats, picks up a few pointers from the junior set at the Martineztown House of Neighborly Service. Ron and Don Morrison (1713) are members of the board of directors for the community center which provides nursery and kindergarten services, vocational training and guidance, and recreation facilities for residents of Martineztown. Supported by the United Community Fund and the United Presbyterian Church, as well as through private donations, the facility has served the community of mostly Spanish-Americans for more than 35 years.



EQUALITY for working women was the object of a recent visit by Miss Elizabeth Kuck, newly-appointed commissioner to the federal Equal Employment Opportunity Commission. She addressed a meeting of community leaders at a Coronado Club luncheon. Attending were, from left: President John Hornbeck; Domingo Montoya, chairman of the All Indian Pueblo Council; Miss Kuck; Frank Schifani, president of the Albuquerque Chamber of Commerce, and Walden Silva, deputy area director of EEOC. Miss Kuck said that while more than half of the women in America work, less than one percent earn \$10,000 or more per year.

## Bob Garcia's Goal: Equal Jobs

When J. Robert Garcia was appointed to implement Sandia's role in the Plans for Progress Program, he had little idea of the extent of his involvement in the relationship between industry and minority

His year's assignment as manager of Equal Employment Opportunity Special Assignment Department 3260 has included spending some time in Washington, D.C., and at meetings across the country, as well as at Sandia Laboratories in Albuquerque.

#### "Efforts Pay Off"

And has this effort by Bob and others paid off? In late 1968, a report was made to Vice President Humphrey on the Plans for Progress Program for the past four years. "Right now 440 companies (including Sandia Laboratories) are members of Plans for Progress," Bob says. "These firms employ some 10 million persons of whom 10 percent (or one million) belong to minority groups. Four years ago only five percent were from minority groups. I feel this difference indicates more involvement by businessmen in the problems of these

Bob's approach to the employment problem has been many-sided. His initial attention focused on programs oriented toward the negro labor force on the East Coast. A College Placement Conference in Atlanta brought academic people from largely negro colleges together with southern employers in an attempt to upgrade the quality of these schools. The conference resulted in creation of the "College Cluster Program" in which industries "adopt" a negro college in their area, loan equipment for classroom use, help students get acquainted with an industrial environment, and exchange faculty and technical employees when possible. At present, 34 out of 102 negro colleges participate in this program.

#### "Industry Awareness"

Since this first effort, Bob has been more concerned with industry awareness of the large group of unemployed Spanish-speaking persons and Indians. Bob helped plan the Southwest Employer Conference on Mexican-American and Indian Employment Problems held last summer in Albuquerque, he spoke at the National GI Forum Conference in Corpus Christi, and he attended meetings in Denver and Des Moines aimed at emphasizing the importance of vocational guidance institutes.

Last fall he spent a frantic two weeks as a member of a Plans for Progress team which conducted a 14-city "marathon" conference. Corporate heads joined the conference and programs, problems, and new directions were discussed. Bob's cities included Detroit, Chicago, Los Angeles, San Francisco and Dallas.

Meetings with employers and school system officials in San Antonio and Phoenix also were held to discuss development of youth motivation programs.

#### "California Conferences"

A recent activity was conferences with employers in Northern California - and a few weeks later with their counterparts in Southern California — to determine problems in employment of Mexican-Americans.

Right now Bob is busy serving as coordinator for the National Plans for Progress Conference to be held in Washington, March 20-21. Shortly thereafter he will return to Albuquerque full-time.

"I have recruited several men from other industries to follow up and broaden the program that has been established in target cities to aid Mexican-Americans and Indians," he says.

## 400 Students Hired in Four Years of Sandia Youth Opportunity Program

In early June, Sandia Laboratories will receive the annual influx of students hired for the summer under the Youth Opportunity Campaign. Since the program started in 1965, more than 400 youngsters have participated.

Purpose of the YOC effort is to provide an introduction to the industrial environment and give the trainees valuable onthe-job training. In so far as possible, assignments are made which are consistent with the student's educational goals.

Selection of the students is based on academic qualifications and economic need. In most cases, the summer of work at Sandia makes it possible for them to return to school in the fall. In recruiting the students, Sandia has the cooperation of schools and state employment offices.

It is anticipated that about 130 trainees will join the company for the summer — 108 at Sandia and 22 at Livermore. Trainees will work primarily on assignments in clerical and manual areas

Supervisors at Sandia readily agree that the students carry their weight on the job. They make worthwhile contributions to the work of the Laboratories.

Studies show that students who participate in Sandia's YOC program remain in school and earn their degrees. One former YOC is now a permanent Sandia employee selected for participation in the One Year on Campus program to work toward an advanced degree.

In past years, the students at Sandia came primarily from the Albuquerque community, although last summer some came from the northern part of the state. This aspect of the program will be emphasized again this summer with a special effort being made to interest students from northern New Mexico.

The Youth Opportunity Campaign at Sandia is administered by Personnel Division II 3232, and by Personnel, Compensation and Labor Relations Division 8212 at Livermore.

Small Town, Big Plans

## Al Banks Helps Bring New Industry to Bernalillo

Al Banks (3352) rebuilt an aging adobe barn in Bernalillo into a handsome residence back in 1961 and the small town 18 miles north of Albuquerque has been "home" ever since. Unlike most commuters, Al spends a lot of spare time participating in the affairs of his home town.

Since last August, Al has been serving on the board of directors of the Bernalillo Development Corporation, a non-profit organization which is out to promote local industry for Bernalillo. After incorporating in October, the group met with singular success.

A new battery manufacturing company has located in Bernalillo as a result of the Development Corporation's efforts. The new industry employs 25 local people.

It was Al's contention, along with other Development Corporation directors, that gaining industry for a small community like Bernalillo would take something more than promotional literature. So their first act was to purchase two acres of land south of Bernalillo, adjacent to the highway and a railroad spur, and to sign an option to purchase 40 more acres.

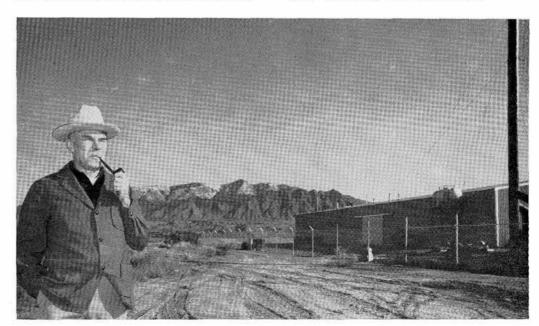
With this to offer to industry, plus a commitment to help erect needed buildings, the Development Corporation has been approached by a number of companies, mostly light industrial firms, with the proposition to locate in Bernalillo.

"Actually," Al says, "Bernalillo has much to offer and many advantages. We think we have a great package for anyone who wants to build a small factory here — a good location with convenient

transportation, assistance in getting a plant built, and an abundant supply of people willing to work."

With this kind of optimism, Al reflects the purposes stated in the group's charter - "Bernalillo Development Corporation is organized for the purpose of promoting and developing industrial, commerical, residental, recreational, and general development in the Town of Bernalillo, Sandoval County, incorporated communities, and Indian Pueblos, and in maintaining the stability and prosperity of the existing industry and economy."

"Bernalillo is a great place to live," says. "C'mon up and look around."

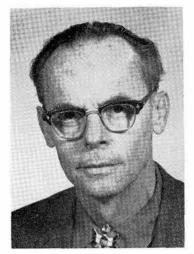


AL BANKS (3352) surveys the acreage that the Bernalillo Development Corporation owns south of the town of Bernalillo. In the background is the battery firm which recently located there as a result of the Development Corporation's efforts. The firm employs 25.

### Service Awards

25 Years





#### 15 Years



William Andrews 9242









Manuel Silva 4575



William Walker



Kyle Williams 4251



Fidel Zamora 4614

### 10 Years

March 14-27 Mavis Bowland 3126, John Seuser 8223, Don Van Dyke 8233, Ruhy Cruze 4131, Albert Narath 5100, Glenn Guist 7651, George Blanchette 4253, Jerry Wackerly 8161, Janet Johnson 3421, Helen Kent 9411, and William Womack 9224.

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Gordon Harvey 1548



Thomas Pace 7210

Hubert Patterson 9230

#### March 20-21

#### Movie Shows Draftsmen Down the Colorado River

If you have enjoyed the Grand Canyon photo exhibit in the elevator foyer of Bldg. 802, here's a chance to "join" five Sandia draftsmen on their trip down the Colorado River.

A half-hour color film, "Run the Wild Colorado," will be shown at 12:15 p.m., Thursday and Friday, March 20 and 21, in Bldg. 815. The "actors" in the adventure movie include George Farwell, Martin Kodlick, Stan Major, Clarence Olson, and Don Keeneer (all of 7600). It will be the first time they've seen the film, too.

The Sandians made the four-day trip last May. Their float down the river extended 87 miles from Lee's Ferry to Phantom Ranch, where they hiked out to the south rim of the Grand Canyon and flew back to Page, Ariz., their starting point.

"Everything was well-planned and comfortable," Martin Kodlick says. The group cruised through Marble Canyon, explored Stanton's Cave, and hiked to old mines and ruins of Indian dwellings. The only trouble encountered in the rapids was when the supply boat caught on a rock. Shifting the cargo to one side of the rubber boat solved that problem.

Aside from that, the trip went smoothly. "It's true that night life on the Colorado is a little limited, but somehow that didn't bother us much," added Martin.

### Supervisory Appointments



LARRY BERT-HOLF to supervisor of Dynamic Analysis Division 5162, effective March 1.

A staff member in that division since he first joined Sandia in 1966, Larry has been involved in one- and twodimensional wave

propagation studies and calculations which have direct application to large computer codes

He has a BS in mechanical engineering and a PhD in engineering science from Washington State University where he was a teaching assistant for one year and an instructor for one year.

Larry is a member of the American Society of Mechanical Engineers.

From 1958 to 1966, he served as a radar technician with the Washington Air National Guard.



FLOYD ENG-LISH to supervisor of Microelectronics Division 2633, effective March 16.

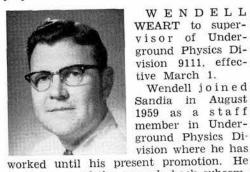
Floyd has worked in the Solid State Electronics Research Division since he joined Sandia in August 1965. His work in

that area involved studies of ferroelectric surface phenomena.

Following his graduation from Chico State College, Calif., where he received an AB degree, Floyd taught physics there for one year. He then went to Arizona State University where he was a teaching assistant and earned MS and PhD degrees in physics.

From 1954 to 1957, Floyd was an artillery officer with the U.S. Army.

He is a member of the American Physical Society, the Institute of Electrical and Electronics Engineers, and Sigma Xi.



WENDELL WEART to supervisor of Underground Physics Division 9111, effective March 1.

Wendell joined Sandia in August 1959 as a staff member in Underground Physics Division where he has

is chairman of the ground shock subcommittee to the Nevada Test Site planning board and has provided technical guidance on the earthquake and after-shock aspects of nuclear detonations. Before joining Sandia, Wendell worked

three years as a geophysicist for the U.S. Army Ballistics Research Laboratory at Aberdeen, Md. He has a BA degree in mathematics and

geology from Cornell College, Iowa, and a PhD in geophysics from the University of Wisconsin.

Wendell is a member of the American Geophysical Union, the Seismological Society of America, and the Society of Exploratory Geophysics.



PAUL BREWER to supervisor of Vouchering Division 4135, effective March 1.

Paul began at Sandia in Employee Benefits Division 3122 in August 1966 where he worked for one and onehalf years. He then

worked in Personnel Systems Division 4111 until being promoted to his present posi-

A graduate of the University of New Mexico, Paul holds BBA and MBA degrees. He served in the U.S. Navy from 1963 to 1966, first as a supply officer aboard the U.S.S. Summit County. He later was

stationed at Sandia Base where he was Security Classification and Top Secret Control Officer for the Navy Weapons Division for two years.

### Nat'l Precision Graphics Committees Will Meet at Sandia Laboratories

Sandia Laboratories will host a meeting of members of three national committees of the Association of Precision Graphics here March 20-21. Al Bridegam, supervisor of Precision Graphics and Programming Section 7553-1, is a member of the executive committee of the organizations and serves as chairman of two of the national committees Applications and Operations and Systems Planning.

Larry Woodard (7653-2) is chairman of the Hardware and Maintenance commit-

Organized two years ago, the Association for Precision Graphics serves the field of computer-controlled design, drafting, and production of precision graphics.

#### SHOPPING CENTER

#### CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication unless changed by holiday. A maximum of 125 ads v.ill be occept-ed for each issue.

RULES 1. Limit: 20 words 2. One ad per issue

One ad per issue per person Must be submitted in writing

3. Must be submitted in writing
4. Use home telephone numbers
5. For Sandia Corporation and
AEC employees only
6. No commercial ads, please
7. Include name and organization
8. Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.

#### FOR SALE MISCELLANEOUS

UNDERWOOD portable typewriter w/case, \$15. Jol-

HONDA motorcycle, 50cc sport, \$110; wish to trade up for a Honda 90cc trail cycle. Chandler,

COMPLETE HOUSEHOLD OF furniture: dinette: gas range; refrig.; LR suite; tables; lamps; rug; console TV; bd. suite; mattresses; bed springs; chest; vacuum; washer, other items. Stark, 299-5953.

TWO slightly used 6:50 x 13 snow tires, \$15; chains, \$5; roof mount lock type ski rack for compact cars, \$10. Jones, 296-1755.

DINETTE set, table & 4 chairs. Pitti, 256-1629

RECLINING CHAIR, brown vinyl, w/ottoman, needs recovering, \$10; girl's 20" bike, J. C. Higgins, \$12. Trump, 299-5162. DIVAN & CHAIR, provincial style, dull gold & green pattern. Quigley, 299-3178.

HARMON-KARDOM Citation III FM tuner, cost \$259, sell for \$100. Simmons, 282-3214.

350 BACK ISSUES of photographic magazines, \$15 for the lot. Watkins, 299-0411.
TRAIN LAYOUT, American Flyer, diesel, steam engines, 8 cars, 42 sq. ft. L-shaped table, switches, bridges, grade, tunnel, bldgs., cabinets below \$60. Harnar, 299-3400.

REE black male toy poodle to right home; clothes line w/poles; for sale-full Buco helmet w/bubble shield, new, still in box, cost \$38, sell for \$25. Campbell, 268-8445.

1 WHITING, 7:00 x 15, 6-ply tire & tube, used for only 75 miles, \$25. Knoff, 344-6623. '67 YAMAHA 305 scrambler, 6700 miles, \$450 or best offer. Ferguson, 268-0859.

BOAT, 16' fiberglass, 90hp Evinrude, 51/2hp Johndrive on trailer. Otero, 255-2555.

WRL GALAXY 300 transceiver & AC power sup-ply, \$150; ONAN 12v gas generator, \$35; 8'' bench saw, \$10; 20'' window fan, \$10. Snyder, 268-0679 after 6.

TWO on-road/off-road Goodyear 7:00x16, 6-ply tires, used less than 2500 miles, \$25 ea. Ryan, 299-3318.

WET SUIT, size small, \$10. Opalka, 345-1731, after 5:30.

MEMBERSHIP FLYING CLUB, F.T.F. Inc., 1960 Skylane, dual omni, MK XII, ADF, full panel. Anderson, 268-0793.

CRAFTSMAN grinder, belt-driven, ball bearings, 6"x34" wheels, one 36 grit, one 70 grit, unused, \$16. Sims, 255-6967.

TAPPAN 400 oven-over electric range w/free-standing base, recently steam cleaned, brushed stainless steel range top & doors, \$80. Venner,

FACTORY BUILT camping trailer chassis, hydraulic brakes, 15" wheels, extra tire, 15' long, \$125.

brakes, 15" wheel Shock, 877-3728.

35MM slide projector, Revere w/26 slide trays, \$32.50. Denney, 268-0004.

14' SEA KING fiberglass runabout, 40hp electric start, storage cover, sun roof, tilt trailer, deluxe extras. Miller, 255-1324.

CESSNA 175 — 1959 low time eng., full pa \$500 under blue book cost. Little, 255-0558

AKC registered Airedale puppies, \$75. Carstens, 898-0065.

REFRIGERATOR & stove, \$75 each. McIlroy, 8806 Aztec Rd. NE, 296-7275.

NIMROD-hardtop canvas trailer. Eden, 298-7397.

8MM REVERE movie camera, projector & editor-splicer, \$50; Argus C-3, \$10. Browne, 296-1036.

PORTABLE dishwasher, Sear's Lady Kenmore, 21/2 yrs. old, \$75. Schnetzer, 298-8255.

EA KING, outboard motor 12hp, 2 extra props, \$165. Sheaffer, 255-9473 after 5:30. TABLE SAW, 10" tilt arbor, drill press, table top, gonset G-66-B receiver. Vandenberg, 344-6950 after 6.

10" TILT ARBOR table saw, 2 extensions, bench, power panel; 4 1/8" jointer planer,  $\frac{3}{4}$  horse motor, wire brush & buffer. Laney, 299-8828. DISHWASHER, portable, aqua, Whirlpool; gas range

flow, new, 30"; refrigerator, 14 cu. ft., w freezer; rangehood 36". Rose, 256-2307. BUNK BEDS, extra heavy — special built, uses twin size mattress & springs (not included), four toy drawers built-in, \$75. Singleton, 299-1613 after 5:30.

BEAUTYREST double bed, complete, \$65; antique sectional bookcase, \$38; sailing ship captain's chair, \$35. Smitha, 299-1096.

AKC LABRADOR retrievers, 8 wks. old, both yellow & black available. Benson, 268-9727. CAMPING TRAILER, 7-ft. Cerro Scottie, \$550. Bascom, 247-3871.

NET PLAY PEN, \$10; elect. sterilizer w/bottles, \$5; other misc. baby items. Tassia, 299-6096. USED TV, working, Philco, cabinet model, \$20 or best offer. Robertson, 296-4613.

SILVER TOY POODLES, very small, AKC reg., excellent pedigree, 2 males, 1 female. Chavez, 298-0674.

FENDER BASSMAN amplifier w/covers, \$250; bass guitar, \$80. Mikkelsen, 268-1485.

#### REAL ESTATE

<code>HOUSE & APT.: 21/2 bdr., \$57/mo. w/apt. bringing \$60; \$195. move-in, 306 & 3061/2 Texas NE. Bascom, 299-9044 or 255-4772.</code>

<code>HOFFMANTOWN</code> home, must sell at loss, 3-bdr., fully carpeted, 11/2 baths, \$94/mo., low down, assume FHA note. Faro, 299-1265.

ROBERSON 3-bdr., 134 bath, family rm. kitchen, dbl. garage, assume 534% FHA loan, \$17,500 total price, 3300 Britt NE. Krieg, 298-2895. TRIPLEX, 1 3-bdr., 1/2 baths, garage & two 2-bdr., frame const., pitched roof, NE, mortgage balance \$15,000, total \$22,000. Baca, 255-

BELLHAVEN ADDITION, brick, 3-bdr., 134 baths, FR w/fp. cfa. AC, carpets, walled, dbl. garage, assume 534% loan, buy equity. Carriere, 265-0460.

RESIDENTIAL LOT, 75' front, located at 1121 Glorietta NE, 1 blk. from Los Altos School. Cordova, 299-1652.

3-BDR., custom, 2000 sq. ft., 1¾ baths, den, fn, built-in kitchen, \$2750 equity, assume 5¾% loan. Aker 298-2793.

ROBERSON 3-bdr., living-dining rm., 134 baths, fp. hw/floors, 1376 sq. ft., 51/4% Gl loan. Sullivan, 299-1348. -BDR. BRICK, 41/2% loan, near base, 13/4 baths, hw/floors, carpet, covered patio, sprinklers, AC, \$16,900, 1125 Dakota SE. Rentzsch, 265-

\$1700 EQUITY in 534% mortgage, 3-bdr., 134 baths, near elementary school & park. McGuckin,

298-8091. ROBERSON 3-bdr., den, fp, nylon carpeting, draperies, patio, AC, 1420 sq. ft., \$18,500, 534% FHA, \$3600 equity. Meyer, 298-4825.

CARS & TRUCKS '57 TR-3, \$550. Anastasio, 299-7012 after 6. '66 VOLKSWAGEN, R&H, one owner. Yoder, 299-3875.

'63 CHEV Belair wagon, R&H, AT, 6-pass., V8, below book. Reid, 344-0521. '69 VALIANT, 3600 miles, R&H, AT, \$300 for equity. Eaker, 255-1900 evenings.

'57 VW, new trans., no headliner, needs paint, \$400. Stromberg, 255-6131. '67 CHEV. pickup, V8, 25,000 miles, ½-ton. new tires, 3-spd., short wide bed, R&H; '66 Apache buffalo tent trailer, used 3 times, new \$1250, sell for \$700. Baumann, 299-7974.

'65 PLYMOUTH convert., 383 cu. in. V8, PS, PB, AT, R&H, \$1150. Falacy 345-1731 after 5:30. '58 FORD 4-wd 3/4-ton. Newton, 255-2074.

'65 CORVAIR MONZA, 4-spd. trans., 2-dr., white/ red interior, R&H. Fergesen, 299-1501 after 5. '60 T-BIRD, all power equip., AC, rebuilt 352 engine, \$600. Duimstra, 299-9278.

'60 VW sedan, \$350. Everett, 636-2544, Bosque '58 RAMBLER, AT, PB, PS. Busby, 299-6450, 3913 Inca NE.

#### FOR RENT

ROBERSON HOME at 9705 Euclid NE, 3-bdr., 134 baths, water softener, electronic heating, enclosed garage, \$130/mo. Johnson, 247-8634.

FOR LEASE: 3-bdr. house, carpeted, drapes, 2-car garage, stove, AC, NE Heights, \$145/mo. Schnetzer, 298-8255.

FURNISHED 3-bdr. house, SE, carpeted, walled backyard, garage, near bus, schools, no pets \$150/mo. Campbell 256-1015.

### WANTED

TEXTBOOK, "Adv. Calculus," Kaplin, will trade new text "Intro. Solid State Phys.," by Kittel. Wentz, 298-2630.

CAMPING TRAILER, 15' to 17' for first or second week in June; 16" or 20" girl's bicycle in good condition. Garcia, 256-7606.

CANDE; M1 carbine; rachet wrenches; belt sander; concrete block & lumber; oversize bunk beds. Tiefa, 299-2763.

16" TURNTABLE, electric, have several items to trade. Aaron, 296-6822 evenings. 8' STEP LADDER or 16' extension ladder that may be used as step ladder. Patterson, 877-3158.

34 SIZE GUITAR w/nylon strings, under \$20. Tid-18' TO 20' SELF-CONTAINED sport trailer, sleeps six, butane & electric refrig. Sheaffer, 255-9473.

SILVER FLUTE, McIllroy, 299-4977, 8907 Los

BODY and fender tools, disc sander, air com-pressor and painting equipment. Levesque, 299-1213.

WOULD LIKE ride to and from work to vicinity of Fair Plaza. (Work in Bldg. 836). Lorraine Cook 268-6406.

#### LOST AND FOUND

LOST—Turquoise set from earring, crystal drop earring, man's wedding band, pr. blue sapphire earrings. 2 \$5 bills, hand-made agate mounted in silver bolo tie on silver cord, white w/red stripe stocking cap, pr. black leather-palm man's gloves. SC sunglasses in clip-on pouch, white compact w/attached lipstick holder. Rx GI dark LOST AND FOUND, tel. 264-2757 610.

FOUND—Pink chiffon scarf, man's brown leather glove, olive & black knit stocking cap, 1 ladies white rain boot, 1 key, pipe, heart-shaped white gold watch on chain. LOST AND FOUND, tel. 264-2757, Bldg. 610.



PRETTY GIRLS, leprechauns, corned beef, Tommy Kelly and the Smiling Irishmen, and lots of singing and dancing will all be part of the St. Patrick's Day celebration tomorrow night at the Coronado Club. Sue Gum (3251) and friend say the festivities will start at 7 p.m.

Fridays. The buffet is spread from 6 until

8 p.m. while the music plays from 6 until

9 p.m. Special prices prevail until 8 p.m.

Cheryl Warmke and piano entertain in the

Special prices are repeated for the Tues-

A new 10-week series of dance classes

start at the Club on Monday, March 17.

Beginners will meet at 7 p.m., advanced

students at 8:30. You may enroll by con-

tacting the Club office before the first

class starts. Both classes will meet on Mon-

day evening social hours from 5 until 8

main lounge from 9 until 12 p.m.

Dance Classes

#### Coronado Club Activities

### Join the Smiling Irishmen for St. Patrick's Day Dance Saturday

St. Patrick's Day will be celebrated tomorrow night at the Coronado Club with wearing of the green, corned beef, and Tommy Kelly and the Smiling Irishmen on the bandstand. The festivities start with dinner at 7 p.m., entertainment by the Hilarys at 8:30 and dancing from 9 to 1 a.m.

Tickets cost \$2.50 for members, \$2.75 for guests.

#### Social Hours

will hold the bandstand.

Tonight, Phil Graham and his orchestra will make the happy music during the chicken buffet.

On Friday, March 21, the seafood buffet will be the menu feature while Ron King and the Souls play for dancing.

and the Souls play for dancing.

The Mexican buffet will be spread Friday, March 28, and the Rhythm Masters

Social hours start right after work on

### Sandia Safety Signals

You may only need seat belts once.

(but which once?)



Published to save lives in cooperation with The Advertising Council and the National Safety Council. For free copy of Seat Belt Fact Sheet write: N.S.C., 425 No. Michigan Avenue, Chicago, Ill. 60611

#### Observe Wildlife Week— Listen to Tall Stories Of the Great Outdoors

The 55th annual liar's contest and buffalo banquet will be sponsored by the New Mexico Wildlife and Conservation Association on March 21 as one way to focus attention on National Wildlife Week (March 16-22).

Former Governor Tom Bolack will be master of ceremonies for the fun-filled evening. The tall-tale tellers will include two Sandians, Tom Harrell (4364) and Bill Emrick (1516). The banquet will be held at the Youth Hall, State Fair Grounds.

Gerry Wilson (7333), president of the Albuquerque chapter, notes that the organization approaches the problem of wildlife conservation from diverse ways. There are archery and fishing clinics, plus a planned skeet club clinic. Semi-annual hunter safety programs are conducted for members and non-members.

The group gets involved in both Congressional and legislative bills which could affect conservation, and some members speak on conservation matters before various city groups.

Another activity is smoothing out problems between hunters and private landowners. During a recent antelope hunt, the chapter sent letters to all successful license applicants suggesting proper conduct for hunters on private land.

Sandians holding office in the local chapter include Byron Hock (7212), secretary, Lee Heames (5244), second vice president, and board members Corry McDonald (3416), Gene Dirnberger (7217), Charlie Hines (3512), and Jim South (4222).

### April 1 is Deadline For SWC Scholarships

April 1 is the deadline for applications for the four scholarships being offered by the Sandia Women's Club. The scholarships, each worth \$210 for two semesters' study, are available to dependents of active or retired military personnel, employees or dependents of employees of Sandia Labs, and AEC and Sandia Base civil service employees or their dependents.

Recipients will be selected on the basis of financial need, scholastic ability, faculty recommendations, and the student's acceptance by an accredited university, college, or junior college.

Interested candidates may obtain application forms at the Sandia Branch of the Bank of New Mexico, or by writing to Mrs. J. W. Straight, 1606 16th Loop, Sandia Base, N.M., 87116.



AN EASTER PARADE of spring fashions will be presented at the Club during the noon hour Tuesday, March 25. Models will include Maureen Cooper (left) and Soila Candelaria (4364).

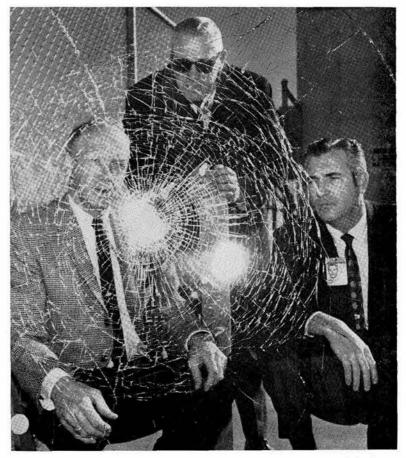
#### Classification Society Installs Officers

"One of Our H-Bombs is Missing," Bill Barton's on-the-scene account of Sandia's participation in the search and recovery operations at Palomares, Spain in 1966, was the featured talk at the winter dinner meeting of the Rocky Mountain Chapter of the National Classification Management Society.

The official charter of the new chapter was presented by the outgoing president, Jim Marsh (3414), and the 1969 officers were installed at the meeting, which was held at the Sandia Base Officers' Club on March 8. The new officers are: president, William Green, Field Command, DASA; vice president, Franklin Halasz (3414); secretary, Helen Kercher, Ken O'Brien and Associates; and treasurer, M. D. Gordon, Dikewood Corporation.



BREAK IN? Not here. Even though Norm Scott (3511) was able to crack this piece of glass with a blow from a two-by-four, he still could not gain entry if it were a window or door of a building. The new type of security glass, being installed in the new Radiation Safety and Surveillance Laboratory Building, withstood the assault of repeated blows with the two-by-four and an iron crowbar and the probing of a knife. A glass-polyvinyl-glass sandwich forms the nearly-unbreakable sheet. Frank Norris of Planning, Budgeting & Control Division



4541 says the new glass "is better than a concrete block wall from a security point of view. It would take longer to gain entry through this glass by beating it with a sledge hammer that it would to beat a hole in a concrete block wall," he says. Above, the cracked but intact plate is examined by Frank, Norman, and Don Knott, supervisor of Building and Facilities Design Division I (4542). The security and safety features of the glass were demonstrated at a recent plant engineering seminar attended by representatives from Sandia and AEC.